



October 9, 2017

Chairman Ajit Pai
Commissioner Mignon Clyburn
Commissioner Michael O’Rielly
Commissioner Brendan Carr
Commissioner Jessica Rosenworcel
c/o Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: ET Docket No. 14-165 and GN Docket Nos. 12-268 and 14-166 Via Electronic Filing

Dear Chairman Pai, Commissioner Clyburn, Commissioner O’Rielly, Commissioner Carr, Commissioner Rosenworcel, and Ms. Dortch,

On behalf of City Theatre Company, located in Pittsburgh, PA, which provides approximately 200 performances per year to 30,000 audience members and education programs to 2,500 students, I write with concern about available spectrum and protection for our wireless microphones and backstage communications devices.

We strongly support the Commission’s proposal to expand Part 74 license eligibility to include persons and organizations that can demonstrate the need for professional, high-quality audio and have the capability of providing it through conscientious use of wireless microphones. We support and endorse the Comments filed in these dockets by The Performing Arts Wireless Microphone Working Group. This proposal would greatly assist our mission to provide an artistic home for the development and production of contemporary plays of substance and ideas that engage and challenge diverse audiences.

Professional performing arts organizations hold thousands of performances each year, and wireless microphones are essential to producing high-quality performances while mitigating significant public safety concerns. Professional wireless capability, with successful interference protection, is essential to our sector.

City Theatre uses 600 MHz UHF equipment for every production and every performance and owns wireless microphone systems, and more importantly, 2-way intercom systems—all analog equipment operating in the 600mHz band. The six microphone systems are Audio Technica 3000 series band D 655.5–680.375 MHz (TV Channels 44–49) and can operate on any of 200 selectable frequencies. On occasions, City rents higher quality units for the most critical applications, or when six are not enough. The company sometimes rents IFBs to send high quality sound to theatrical props loaded with an amplifier and speaker, making them completely mobile and much more reliable than newer technologies (WiFi, Bluetooth). Each of City Theatre’s two stages is outfitted with Telex Radiocom BTR-800 band H3 units for stage communications to Stagehands and House Management. These systems have revolutionized the ability to safely and consistently conduct the production realities on



stage and bridge communications for the well-being of our audience. In the event of an emergency, these intercoms are crucial. Each 2 channel base station uses 2 listen channels, selectable from 500—516 MHz, while each receiver is assigned a talk channel, from 650—668 MHz. To do this, City Theatre uses 10 frequencies; six in the High UHF band and four in the Low UHF. The intercom units are expected to have up to 20 years of useful life as a system and up to 15 years with wireless microphones and IFBs. When the 700 MHz space was vacated, City Theatre had one affected device—an IFB—which was removed from the inventory without replacement. On a few occasions City has rented to make up for its loss. Unfortunately, long-term rental is not an option with equipment that is used every day, but owning the equipment is not practical either given the history of frequency spectrum repurposing. City Theatre has a Sound Engineer on staff who holds a BA in Audio Engineering, Production and Technology from Middle Tennessee State University and has been working as a professional sound technician for 16 years, eight (8) of which have been at City Theatre Company.

I would urge the Commission to grant a Part 74 license if an applicant can provide certification of:

- A mission statement of providing performing arts to the public;
- A history of professional-quality wireless audio presentations to audiences without interference;
- Technical guidance and frequency coordination by qualified professionals (active in audio engineering who have academic degrees or equivalent professional experience and who are familiar with radio-frequency coordination);
- A commitment to register for protection only the frequencies, times, and locations actually needed; and
- A practice of keeping logs of all wireless microphone uses, including frequencies, for all performances.

Thank you for seeking Public Comment on this very important issue. As a company providing quality of life to its patrons and adding over \$5 million to the economy annually, we request that the commission consider the burden already borne by the theatre community in vacating the 700 MHz band by expanding Part 74 license eligibility. City Theatre's loss was minimal in comparison to some of our peers in the field. Expanding Part 74 LPAS rules to accommodate performing arts organizations and educational institutions that use fewer than 50 wireless microphones would be a much-needed solution that benefits the arts community and the public as well as the many new and emerging unlicensed white space technologies.

Sincerely,

A handwritten signature in black ink that reads "James McNeel". The signature is stylized with a large, looped "J" and a horizontal line underneath.

James McNeel
Managing Director
City Theatre Company